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38. FIRST RECORD OF *PERISTYLUS MONTICOLA* (RIDL.) SEIDENF (ORCHIDACEAE) FOR INDIA FROM ANDAMANS

Peristylus monticola (Ridl.) Seidenf. previously known from Indonesia, the Philippines, New Guinea and Malaya has been located from Andaman Islands and reported for the first time from India. The genus *Peristylus* Bl. holds over 70 species of which over 28 species occur in India (Sathish Kumar and Manilal, 1994) and 3 species viz. *P. mannii* (Reichb. f.) Mukerjee, *P. monticola* (Ridl.) Seidenf and *P. parishii* Reichb. f. in Andaman-Nicobar Islands. *P. monticola* was collected by me from Saddle Peak of North Andaman and grown in my personal collection. The occurrence of this rare species in Andaman Island extends its known range of distribution to India.

Peristylus monticola (Ridl.) Seiden. & Dansk Bot. Arkiv. 31, 3: 35. t. 13. 1977; Seidenfaden & Wood Orch. Malay Pen. Singapore 103. t. 42. 104.

1992.

Terrestrial herbs, c. 50 cm high. Leaves oblong-lanceolate, 3-10 x 1-3 cm. Spikes 20-40 cm long. Flowers small, greenish-yellow. Spur as long as the sepals and petals.

Rare, in moss-covered hilly slopes, grows along with *Actinostachys digitata* (L.) Wall. ex Hook., *Eria muscicola* (Lindl.) Lindl., *Porpax elwesii* (Reichb. f.) Rolfe, etc.

Specimen examined: INDIA: North Andaman, Lower-Saddle Peak; + 600 m, 24.xi.1993, P.V. Sreekumar 16436 (PBL)

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REFERENCE

SATHISH KUMAR, C. & K.S. MANILAL (1994): A catalogue of Indian Orchids. Bishen Singh & Mahendra Pal Singh, Dehradun.

39. ON THE PERIANTH BRISTLES IN *SCHOENOPLECTUS CORYMBOSUS* (ROTH EX ROEM. & SCHULT.) J. RAYNAL

(With one text-figure)

The genus *Schoenoplectus* is differentiated from the other genera of Cyperaceae by a complex of different characters. There is no single common character in all the species of this genus by which it can be separated from the other

genera. The characteristics of this genus are the spirally arranged glumes and the style not articulated with the ovary. However, these are common characters in many genera of Cyperaceae, hence it is not a natural genus. A

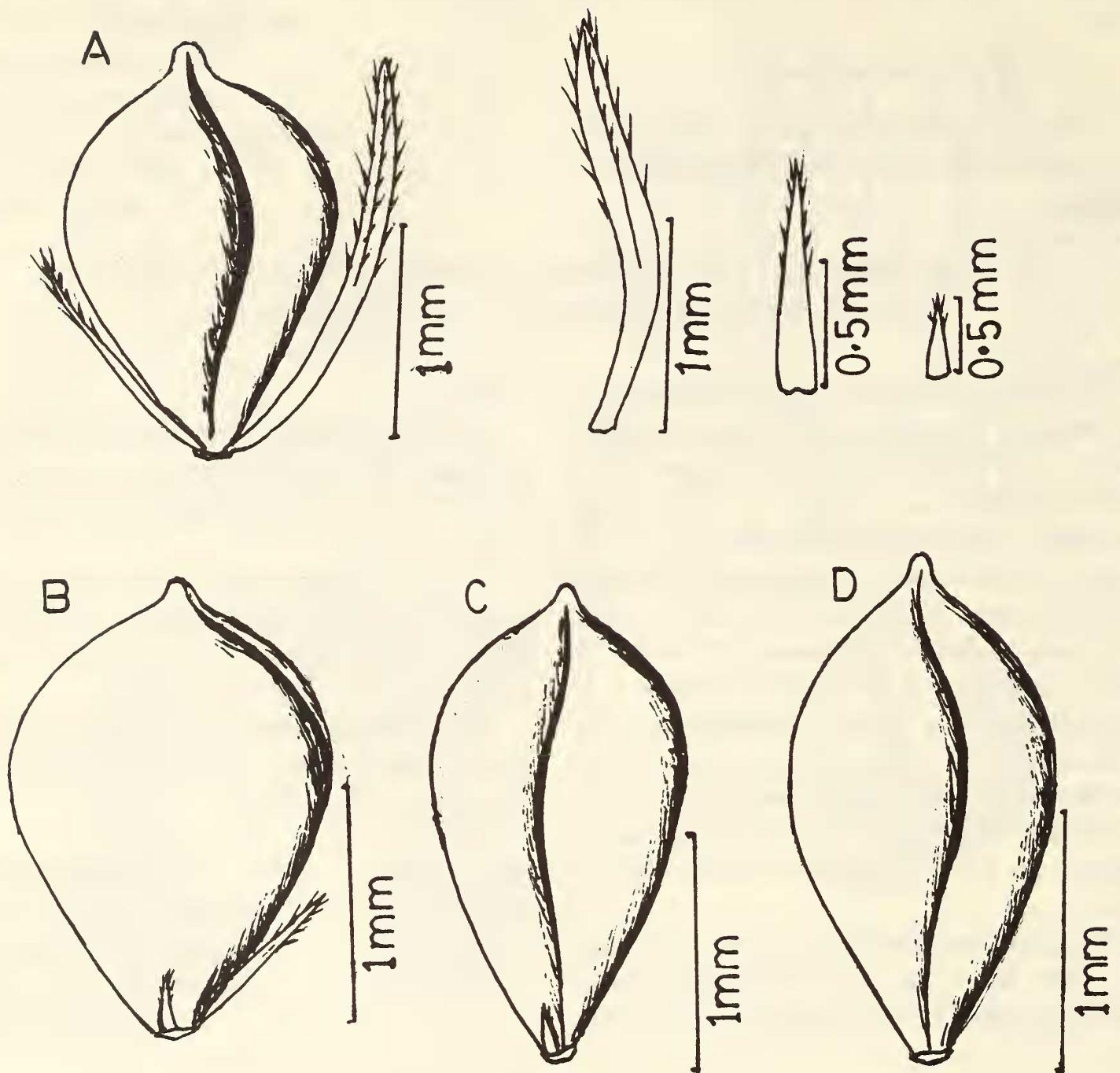


Fig. 1. *Schoenoplectus corymbosus* (Roth ex Roem. & Schult.) J. Raynal

- A. Obovoid nut with well developed bristles; separated bristles;
 B. Flat inner face of the nut with smallest bristle; C. Nut with a single rudimentary bristle;
 D. Ellipsoid nut without bristles.

natural genus has atleast some characters common to all its species, viz. *Bulbostylis* has the persistent button like style base on the nut. *Fimbristylis* has the deciduous style base articulated with the nut and *Eleocharis* has the dilated style base articulated with the ovary, which is persistent on the nut. Hence these are considered to be natural genera and *Schoenoplectus* an artificial genus.

At times certain characters are highly variable within a species (not only in *Schoenoplectus*) and often such variations can also be found within individuals. The presence of hypogynous bristles in *Schoenoplectus corymbosus* is one such variable character. All the earlier workers have reported that bristles are absent in this species. But a careful study of some

specimens from Maharashtra and Gujarat revealed that this character is highly variable. In these specimens three, quite unequal bristles were found. These are linear-lanceolate, acute at the apex and antrorsely scabrous (retrorsely scabrous in most Indian species) on the upper half. The longest bristle varies from much smaller than to equaling the length of the nut. It is somewhat broad and glume-like, membranous, 0.5 - 2 mm long. The smallest bristle is usually minute, scale-like, upto 0.5 mm long, and is found opposite to the broadest face of the nut. In some cases only a single, rudimentary, scale-like bristle was found. Also, there are specimens in which perianth bristles are absent.

Another interesting observation is that whenever well developed bristles are present the nut is obovoid to broadly obovoid, but if the bristles are absent the nut is ellipsoid. An intermediate stage between ellipsoid and obovoid is found when the bristle is very small or rudimentary.

Considering the highly variable nature of this character, the possibility of proposing a new taxon even at infraspecific level for the plants with perianth bristles was not considered, because even on a single specimen the nuts were found to be with or without bristles. This abnormal behaviour is recorded, especially for taxonomists, because the perianth bristle is considered an important character in the family Cyperaceae.

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40. LABORATORY EVALUATION OF NATURAL RESISTANCE OF BAMBOOS TO TERMITES

Natural resistance of timbers to insects and other biological agencies is attributed to physical and chemical properties of the wood (Sandermann and Dietrichs, 1967 and Sen-Sarma *et al.*, 1975). Bamboo is a versatile natural forest resource, which is known to play a very important role in the economy particularly of countries lying in the southeast Asian-Pacific region.

Natural resistance of felled and converted wood, to insects and other biological agencies, is attributed to physical and chemical characteristics of timbers. Bamboos though endowed with a hard and highly refractive outer rind, unlike timbers, lack chemical characteristics which impart resistance of high category.

Notwithstanding its versatility and high utility value, authentic data on the natural resistance in bamboos is lacking. Except for the pioneering work of Mishra and Rana (1992), there is no data on the assessment of natural resistance

of bamboos to insects. In this paper, results of laboratory evaluation of comparative natural termite resistance of 13 species of bamboos against the test termite *Microcerotermes beelsoni* Snyder are presented.

We tested material from 13 species of bamboos growing within the New Forest campus of Forest Research Institute, Dehra Dun. The samples were taken at 50 cm, or more above the ground. The test blocks (2.0 x 2.0 x 1.0 cm³ size) were prepared from the internodal portion of these samples and oven dried at 85°C after smoothing the cut surface. Since uniform size of the test blocks could not be obtained due to varying thickness of the wall, the percent weight-loss in test blocks was calculated on the basis of weight and total area of test block.

The samples were exposed to the termites, *Microcerotermes beelsoni* Snyder following the standard procedure developed at this Institute